Patent Claims

- 1. Flameproof polyamide moulding compounds, comprising
- 5 a) 20 80% by weight of one or more aliphatic polyamides
 - b) 1 40% by weight of one or more partly aromatic polyamides
- c) 1 18% by weight of a flameproofing agent, containing a
 phosphinic acid salt of formula (I) and/or a diphosphinic acid salt
 of formula (II) and/or polymers thereof

$$\begin{bmatrix} R1 & O \\ R2 & P-O \end{bmatrix}_{m} M \tag{1}$$

$$\begin{bmatrix}
O & O \\
O-P-R3-P-O \\
R1 & R2
\end{bmatrix}_{n} M_{x} \qquad (2)$$

wherein

15

- R¹, R² are the same or different and mean C₁-C₆ alkyl, linear or branched, and/or aryl,
- R³ means C₁-C₁₀ alkylene, linear or branched, C₆-C₁₀ arylene,
 -alkyl arylene or aryl alkylene;

M means metal ion from the 2nd or 3rd main or auxiliary group of the periodic table;

m means 2 or 3;

5

n means 1 or 3;

x means 1 or 2,

- 10 d) 5-60% by weight of a fibre- or particle-like filler or mixtures thereof
 - e) 0.05 10% by weight additives

the sum of the proportions a) to e) producing 100% by weight.

15

- 2. Flameproof polyamide moulding compounds, characterised in that they contain 5 15% by weight of the flameproofing agent.
- 3. Flameproof polyamide moulding compound according to claim 1 or 2, characterised in that the aliphatic polyamides a) are selected from the group formed by homo- and copolyamides, the periodical units of which are derived from aliphatic amines, aliphatic dicarboxylic acids and/or aliphatic amino carboxylic acids, the amino carboxylic acids also being able to be used in the form of their lactams.

25

30

4. Flameproof polyamide moulding compound according to at least one of the claims 1 to 3, characterised in that the partly aromatic polyamides b) are selected from the group formed by polyamides, the periodical units of which are derived from at least one aromatic dicarboxylic acid, if necessary from one or more aliphatic dicarboxylic acids and from one or more aliphatic and/or cycloaliphatic diamines.

- 5. Flameproof polyamide moulding compound according to at least one of the claims 1 to 3, characterised in that the partly aromatic polyamides b) are selected from the group formed by polyamides, the periodical units of which are derived from at least one aliphatic dicarboxylic acid, if necessary from one or more aromatic dicarboxylic acids and p-xylylenediamine and/or m-xylylenediamine.
- Flameproof polyamide moulding compound according to at least one of the claims 1 to 5, characterised in that the partly aromatic polyamides b)
 are selected from the group formed by polyamides, the periodical units of which are derived from terephthalic acid and/or isophthalic acid and if necessary adipinic acid and also hexamethylene diamine.

5

- 7. Flameproof polyamide moulding compound according to at least one of the claims 1 to 6, characterised in that a phosphinic acid salt of formula (I) and/or a diphosphinic acid salt of formula (II) and/or polymers thereof, wherein M stands for calcium or aluminium ions, is used as flameproofing agent c).
- 8. Flameproof polyamide moulding compound according to one of the claims 1 to 7, characterised in that the additive is selected from stabilisers, processing aids, anti-dripping agents, colourants and/or pigments.
- 9. Use of the flameproof moulding compounds according to one of the claims for producing moulded articles.
- Use of the flameproof moulding compounds according to claim 9 for producing moulded articles which fulfil the requirement according to the inflammability classification V0 according to UL94 with a test piece thickness of maximum 0.8 mm.